

REMARKS

Claims 7-17 are pending in the application, with Claims 7, 12, and 17 being independent. Claims 1-6 have been cancelled herein, and Claims 7-17 have been newly added.

In view of the amendments above and the remarks below, Applicant respectfully requests reconsideration and allowance of the present application.

Applicant is filing herewith a Substitute Specification along with a marked-up copy of the Substitute Specification, making amendments to the specification to address minor grammatical, typographical, and idiomatic informalities. Applicant submits that no new matter has been added.

In the outstanding Official Action, Claims 1-5 were rejected under 35 U.S.C. § 102(b) over U.S. Patent Publication No. 2002/0000519 (Tsukamoto). In addition, Claim 6 was rejected under 35 U.S.C. § 103(a) over Tsukamoto, alone or in view of U.S. Patent Publication No. 2002/0057422 (Arakawa). Without conceding the propriety of the rejections, Applicant has cancelled the pending claims without prejudice or disclaimer of their subject matter, and without prejudice to claiming the same or similar subject matter in a later stage of prosecution in this or a divisional application.

Applicant has added Claims 7-17 to even more clearly recite the features of Applicant's invention. Specifically, independent Claim 7 is directed to an exposure apparatus including an exposure light source, an optical system, a casing, a gas replacing system, and a control system. The optical system directs exposure light from the exposure light source to a photosensitive substrate. The casing accommodates therein at least one optical element of the

optical system. The gas replacing system supplies a purge gas into the casing to replace a gas inside the casing with the purge gas. The control system controls the gas replacing system so as to increase a flow rate of the purge gas if a predetermined time elapses after an exposure is completed and before a next exposure starts.

Independent Claim 12 is directed to a purging method. The method is adapted for use in an exposure apparatus having an exposure light source, an optical system, a casing, and a gas replacing system as recited in independent Claim 7. The method of Claim 12 includes two steps. The first step controls the gas replacing system so as to increase a flow rate of the purge gas if a predetermined time elapses after an exposure is completed and before a next exposure starts. The second step controls the gas replacing system so as to decrease the flow rate of the purge gas after the flow rate of the purge gas is increased and before the next exposure starts.

Independent Claim 17 is directed to a device manufacturing method. The method includes a step of exposing a photosensitive substrate to a pattern by use of an exposure apparatus having the features included in the exposure apparatus recited in Claim 7. The method of Claim 17 also includes a step of developing the photosensitive substrate exposed in the exposing step.

Applicant submits that the newly added claims are fully supported throughout the specification. Applicant particularly directs the Examiner's attention to page 14, lines 5-10 and 18-22. The invention recited in each independent claim involves controlling the gas replacing system in the exposure apparatus to increase a flow rate of the purge gas if a predetermined time elapses after an exposure is completed and before a next exposure starts. As discussed at page 14

of the specification, this excludes the possibility of a frequent flow rate change during normal a device printing operation.

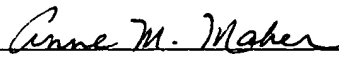
Applicant submits that the cited art does not teach or suggest the features recited in Applicant's newly added independent claims. Specifically, Applicant submits that Tsukamoto, directed to contamination prevention in an optical system, and Arakawa, directed to, inter alia, an exposure apparatus for projecting a mask pattern onto a photosensitive substrate via a projection optical system, do not teach or suggest at least the feature discussed above for the independent claims. Applicant thus submits that the independent claims are patentably distinguishable over the cited art for at least the reasons discussed above.

In addition, Applicant submits that the dependent claims are patentably distinguishable from the cited art for at least the reasons discussed above for their respective base claims. In addition, Applicant submits that the dependent claims recite additional features further distinguishing them from the cited art, and respectfully requests individual consideration of each dependent claim.

In view of the foregoing, Applicant submits that the application is in condition for allowance. Favorable reconsideration and early passage to issue are respectfully requested.

Applicant's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our address below.

Respectfully submitted,



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